COMMENTS ON DOE'S NOI'S TO AMEND THE SCOPE OF THE YUCCA MOUNTAIN RAIL ALIGNMENT DRAFT EIS AND PREPARE A SUPPLEMENT TO THE FINAL YUCCA MOUNTAIN EIS

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My name is Barbara Byron and I am the Nuclear Policy Advisor for the California Energy Commission. I also co-Chair the Western Interstate Energy Board High-Level Radioactive Waste Committee and coordinate two California state agency working groups: the California Nuclear Transport Working Group and California's Yucca Mountain Repository Working Group. My comments address the two Notices of Intent (NOIs) that the U.S. Department of Energy (DOE) issued on October 13, 2006: (1) to expand the scope of DOE's rail alignment draft environmental impact statement (EIS) and (2) to prepare a supplement to the final Yucca Mountain EIS (SEIS).

The proposed actions described in these NOIs and in prior EIS documents for the proposed nuclear waste repository at Yucca Mountain, Nevada pose significant potential new environmental impacts in California that have not been adequately evaluated. These impacts include potential groundwater impacts in the Death Valley National Park region, spent fuel transportation impacts, as well as impacts on wildlife, parks, and natural resources in California.

Preliminary estimates indicate that the proposed new Mina rail route to the Yucca Mountain Repository could result in at least 10% of the rail shipments from commercial reactors in Arizona, Texas, Louisiana, Oregon and Washington, as well as large quantities of high-level nuclear waste from Hanford, Washington, being routed through California to the Yucca Mountain Repository. These estimates also indicate that under DOE's proposed "suite of routes" approach for rail routing, 25-50 % or more of the shipments to Yucca Mountain could be routed through California. Clearly, in light of such major potential impacts in California, DOE should provide potentially impacted communities along likely corridors in California an opportunity to comment on these NOIs.

1. **DOE has not responded to California's request to allow sufficient time for public comment and schedule public EIS scoping meetings in California.**

Because of the significance of these two NOIs for California, the State of California on October 31, 2006, requested that DOE schedule additional public EIS scoping meetings in California, including meetings in Sacramento and Lone Pine. In addition, because the new Mina rail route could result in many additional shipments through Southern and Central California, public

meetings should be held in these regions as well, particularly in the heavily populated Los Angeles area and Central Valley, as well as in Barstow. To date, DOE has not scheduled any meetings in California. We again request that DOE extend the public comment period for both notices by a minimum of 90 days and schedule public EIS scoping meetings in California to allow for meaningful public and stakeholder review and comment on DOE's proposal.

2. **The information provided in these NOIs about the new Transport, Aging and Disposal (TAD) canister is insufficient for understanding the full implications of the proposed actions.**

DOE's proposal to develop and implement a new TAD canister, if adopted, would result in significant impacts to the overall waste handling, storage, transportation, and eventual permanent waste disposal practices at Yucca Mountain. Yet, the implications of the TAD system for the surface facilities at Yucca Mountain and repository performance, which could have potential groundwater impacts in California, as well as the implications of the TAD system for reactor waste storage, management and transportation practices, are not described in the NOIs. The NOIs and SEIS should discuss the implications of the new TAD approach for waste handling and management practices at reactors, including reactors where spent fuel has been transferred to onsite dry cask storage containers and at permanently shutdown reactors where onsite waste handling facilities have been dismantled. The EIS should describe how and where fuel currently stored in dry casks will be repackaged for shipment to the repository and/or blended with fuel remaining in reactor spent fuel pools to meet DOE's repository waste emplacement requirements.

3. **DOE has not adequately addressed concerns raised since 1989 by the State of California.**

Over the past nearly two decades, the State of California has provided input into federal EIS proceedings and policy development programs for DOE's proposed Yucca Mountain Repository. Since 1989, California identified as a major concern the potential migration of radionuclide contaminants from the repository into eastern California aquifers, including the Death Valley groundwater basin. We have requested that the EIS describe DOE's plans for evaluating the potential groundwater impacts in California from the proposed repository project. We also recommended scientific analyses needed to evaluate such potential impacts.

In 1995, the California Energy Commission staff, on behalf of the Western Interstate Energy Board High-Level Radioactive Waste Committee, testified before DOE on its NOI to prepare an EIS for the Yucca Mountain Repository. Our testimony emphasized the Western States' concerns regarding the safety of nuclear waste shipments to Yucca Mountain and the need for the

EIS to examine the varying impacts on states and tribes that a long-term, massive-scale shipping campaign would have. In our testimony, we urged DOE to conduct route and transportation mode-specific analyses of transportation impacts as part of the Yucca Mountain EIS and to fulfill DOE's promise, as stated in DOE's 1986 Environmental Assessment for the Yucca Mountain Project, to conduct in-depth route and mode-specific analyses.

In our review in 2000, the State of California found the Draft EIS to be deficient in its superficial and incomplete discussion of potential transportation and groundwater impacts in California. Specifically, we concluded that the Draft EIS was inadequate and incomplete because it failed to: (1) fully consider transportation impacts from the proposed project, (2) fully evaluate realistic project alternatives, (3) identify and analyze potential route-specific and mode-specific impacts to populations and the environment along shipment corridors, (4) adequately evaluate potential groundwater impacts in California, (5) address issues important to California that were identified early on in the public environmental scoping process in 1995, and (6) provide adequate notice to impacted communities along transportation corridors of the significant transportation impacts from the proposed project.

Despite California's requests and comments made since 1989 on EIS documents related to the potential groundwater and transportation impacts in California from the proposed repository, DOE has not adequately addressed California's concerns.

4. **The NOIs should identify the likely access routes to the Mina rail corridor. The SEIS should evaluate the major potential transportation impacts in California resulting from the use of the Mina rail spur for shipments to the repository.**

Shipments to Yucca Mountain using the proposed Mina rail spur could impact more California communities and result in far greater numbers of shipments than routes previously identified in the EIS proceedings. The SEIS' risk assessment of potential transportation impacts should consider route-specific conditions along any likely corridors in California for repository shipments. These route-specific conditions include: (1) increasing freight train traffic in California due to the increasing flow of goods and imports from Asian countries through the Ports of Oakland, Long Beach and Los Angeles, (2) California's heavily populated and congested Sacramento, Central Valley, and Los Angeles regions (Los Angeles is the second largest metropolitan region in the country), (3) the steep terrain and heavily weather-impacted rail and truck routes over the Donner Summit to Reno, Nevada, as well as corridors through southeastern California that could be heavily impacted by these shipments, e.g., Donner Summit, Cajon Pass, and (4) certain high risk

sections of track in California with prior major derailments and hazardous materials spills.

DOE should identify and provide maps showing the likely rail and truck routes needed to access the Mina route, as well as communities and resources in California potentially affected by these shipments, so that any specific concerns about these routes and can adequately be addressed. DOE should complete route-specific risk analyses along these major routes including the potential impacts from acts of terrorism or sabotage against these shipments.

Although DOE has selected rail as the preferred shipment mode over truck transport, completion of a rail line to Yucca Mountain is costly and uncertain and many reactors lack rail access and would need to rely on truck or barge for offsite transport. The SEIS should identify reactor-specific shipping modes and the likely routes from reactors to the repository and evaluate the environmental impacts from and likely locations of intermodal transfer facilities for truck, rail or barge shipments. The SEIS must identify and evaluate the potential transportation impacts in California from the proposed repository and alternate Mina rail route including the anticipated quantities of spent fuel shipped through California via highway, rail and/or barge, the potential routes, and the potential impacts to the public and environment from these shipments.

In conclusion, we respectfully request that DOE reissue the NOIs at a minimum to provide:

- adequate time and opportunity for public comment in California,
- sufficient information on the implications of the new TAD approach for waste handling, storage, transportation and disposal practices, and
- sufficient information on:
  (1) the likely access routes, including maps, to the proposed new Mina Route,
  (2) the analyses that will be completed to assess the implications of these new access routes for California, and
  (3) how the SEIS' risk assessment will evaluate the potential transportation impacts in California including evaluating route-specific conditions along rail and truck routes in California that are likely to be impacted by shipments to the repository.